## LISTING OF THE CLAIMS:

This listing of claims will replace all prior versions and listings of claims in the application:

1. (Previously presented) Method for manufacturing ceramic parts with a certain porosity by sintering using microwaves, the materials to be sintered being arranged in a vessel, said method comprising:

introducing, via said microwaves, sintering energy into the materials to be sintered via electromagnetic waves in the range of vacuum wavelengths between 5 cm – 20 cm in multimode having an electromagnetic power of up to one kilowatt, wherein, besides being built from primary materials for the structure of the vessel, the vessel is built from a secondary material which comprises at least one material selected from the group consisting of: non-metallic materials, para-magnetic materials, ferro-magnetic materials and antiferromagnetic materials.

- 2. (Previously presented) Method of claim 1, wherein said wavelength range of the electromagnetic waves is between 11-13 cm.
- 3. (Previously presented) Method of claim 1, wherein said ceramic parts have a porosity of between 0-50 percent by volume.
- 4. (Previously presented) Method of claim 3, wherein said porosity is between 10-30 % by volume, the porosity being controllable through the temperature pattern.
- 5. (Previously presented) Method of claim 1, wherein said ceramic parts are infiltrated with a glass material to produce the final strength.
- 6. (Previously presented) Method of claim 1, wherein said ceramic parts are sintered to a defined final density of at least 80% of the theoretical density of the respective material.

- 7. (Previously presented) Method of claim 1, wherein said ceramic parts are dental restorations.
- 8. (Previously presented) Method of claim 7, wherein said dental restorations are veneered using a glass material.
- 9. (Previously presented) Method of claim 1, wherein said material is selected from the group consisting of: Al<sub>2</sub>O<sub>3</sub>, Spinell, Ce- or Y-stabilized ZrO<sub>2</sub>, and mixtures thereof.
- 10. (Previously presented) Method of manufacturing full ceramic dental restorations from dental ceramic masses with a certain porosity by sintering using microwaves, said ceramic masses that are to be sintered being arranged in a vessel, said method comprising:

introducing, via said microwaves, sintering energy into said ceramic masses to be sintered via electromagnetic waves in the range of vacuum wavelengths between 5 cm – 20 cm in multimode having an electromagnetic power of up to one kilowatt, wherein, besides being built from primary materials for the structure of the vessel, the vessel is built from a secondary material which comprises at least one material selected from the group consisting of: non-metallic materials, para-magnetic materials, ferromagnetic materials and antiferromagnetic materials.

- 11. (Currently amended) Vessel for manufacturing ceramic parts with a certain porosity by sintering using microwaves by the method of claim 1, said vessel comprising a primary and a secondary material, wherein said secondary material comprises at least one material selected from the group consisting of: a non-metallic material, a paramagnetic material, a ferro-magnetic material and an antiferromagnetic material.
- 12. (Previously presented) Vessel of claim 11, wherein said secondary material is zincochromite (ZnCr2O4) with 0-99 percent by weight of zincite (zinc oxide ZnO).

- 13. (Previously presented) Vessel of claim 11, wherein, to increase the dense sintering temperature, the secondary material further comprises a refractory non-metallic material having a high transparency for super high frequency waves in a wide temperature range.
- 14. (Previously presented) Vessel of claim 13, wherein said refractory non-metallic secondary material having a high transparency for super high frequency waves is zinc oxide (ZnO).
- 15. (Previously presented) Vessel of claim 11, further comprising a receiving portion for receiving said primary and secondary material to be sintered, said secondary material being provided at least partly around the receiving portion.
- 16. (Previously presented) Vessel of claim 15, wherein said receiving portion is surrounded by at least one, secondary material element.
- 17. (Previously presented) Vessel of claim 11, wherein said secondary material is surrounded by said primary material.
- 18. (Previously presented) Vessel of claim 15, wherein said secondary material extends over the entire height of said receiving portion.
- 19. (Previously presented) Vessel of claim 16, wherein said secondary material element is rod-shaped.
- 20. (Previously presented) Vessel of claim 16, wherein said secondary material element is divided regularly around the receiving portion.
- 21. (Previously presented) Vessel of claim 16, wherein said secondary material element is encapsulated with said primary material.